

SCIENTIFIC STUDIES *references*

GENERAL

Aquatic animal nutrition. By Steinberg (2019, Springer Publ.)

Nutrition and Fish Health. By Lim & Webster (2001, The Haworth Press Inc.)

Use of medical plants in aquaculture. By Reverter et al. (2017, Diagnosis and control of Diseases of fish and shellfish, by Austin, page 223-262)

Research Progress in the application of Chinese Herbal Medicines in Aquaculture: A Review; by Hongyu Pu et al. (Engineering 3 (2017) 731-737)

Herbal biomedicines: a new opportunity for aquaculture industry. By Citarasu (2010, Aquaculture International, 18, 403-414)

Application of Medicinal Herbs to Aquaculture in Asia. By Direkbusarakom (2004, Walailak J. Sci. & Tech; 1 (1):7-14)

Liens entre nourriture des poissons et pathologies. By Bassleer (2017, AquaMag 34, p. 72-76 & Aquafauna 152, 20-27)

Fish Food and Fish Diseases. By Gerald Bassleer (2017, Journal of Fisheries & Livestock Production, 5: 1)

Fish Nutrition and Fish Health: Effects of diet on fish health. By Gerald Bassleer (2017, OFI-Journal, nr.84 + nr.85)

Dossier: Fish Nutrition (renewed edition) (6 languages; EN/DE/NL/FR/IT/ES). By Gerald Bassleer (2020, Aquarium Münster, see link to download: <https://www.aquarium-munster.com/en/downloads/catalogs-flyers/>)

Fischfutter & Fischkrankheiten – richtig füttern und Fischkrankheiten vermeiden. By Gerald Bassleer (2020, Das Lebendgebärenden Magazin 1.2020, p; 14-21)

Diseases in marine aquarium fish. By Gerald Bassleer (2019, Bassleer Biofish)

The practical guide to fish diseases. By Gerald Bassleer (2011, Bassleer Biofish)

The new illustrated guide to fish diseases (3rd Edition). By Gerald Bassleer (2009, Bassleer Biofish)

PROBIOTICA *PEDIOCOCCUS ACIDILACTICI*

Dietary probiotic *Pediococcus acidilactici* MA18/5M modulates the intestinal microbiota and stimulates intestinal immunity in rainbow trout (*Oncorhynchus mykiss*) by Al-Hisnawi, Rodiles, a.o. (2019, Journal of the World Aquaculture Society)

Probiotica *Pediococcus acidilacticii* modulates both localized intestinal- and peripheral-immunity in tilapia (*Oreochromis niloticus*) by Standen, Rawling, a.o. (2013, Fish and Shellfish immunology, Volume 35, Issue 4)

Probiotics in fish aquaculture: The cure against parasitic diseases? Author: Sascha "Remy" Brunner, MSc Marine Biology

Effects of dietary *Pediococcus acidilactici* GY2 single or combined with *Saccharomyces cerevisiae* or/and β -glucan on the growth, innate immunity response and disease resistance of *Macrobrachium rosenbergii*(SHRIMP). By Miao et al (2020, Fish & Shellfish Immunology, Vol 98, p. 68-76)

FORTE: yeast extracts (beta-glucans)

Dietary β -glucans differentially modulate immune and stress-related gene expression in lymphoid organs from healthy and *Aeromonas hydrophila*-infected rainbow trout (*Oncorhynchus mykiss*). Douxfils, Fierri-Castro, a.o. (2017, Fish & Shellfish Immunology, Vol 63, p.285-296)

Modulatory effect of different doses of β -1,3/1,6-glucan on the expression of antioxidant, inflammatory, stress and immune-related genes of *Oreochromis niloticus* challenged with *Streptococcus iniae*. Abdallah, Abeer, a.o. (2017, Fish & Shellfish immunology, Vol. 70, p. 204-2013)

Immunostimulation and increase of intestinal lactic acid bacteria with dietary mannan-oligosaccharide in Nile tilapia juveniles. By Levy-Pereira, Yasui, a.o. (2018, R.Bras.Zootec., Vol 47)

Long-lived effects of administrating beta-glucans: Indications for trained immunity in fish. By Jules PetitGeer & Wiegertjes (2016, Developmental & Comparative Immunology, Vol 64, p. 93-102)

Effects of dietary *Pediococcus acidilactici* GY2 single or combined with *Saccharomyces cerevisiae* or/and β -glucan on the growth, innate immunity response and disease resistance of *Macrobrachium rosenbergii*(SHRIMP). By Miao et al (2020, Fish & Shellfish Immunology, Vol 98, p. 68-76)

The Effect of Dietary *Saccharomyces cerevisiae* on Growth Performance, Oxidative Status, and Immune Response of Sea Bream (*Sparus aurata*) Feeding the fish a diet supplemented with 4 g/kg SC markedly regulated the expression of HSP70, IGF1, and IL-1 β genes. In addition, the 4 g/kg SC-supplemented diet was the most effective in protecting the fish against *Vibrio parahaemolyticus* challenge. In conclusion, SC-enriched diet improved growth performance, intestinal morphology, redox homeostasis, and immune response of *S. aurata* with the 4 g/kg concentration as the most effective. [Life | Free Full-Text | The Effect of Dietary *Saccharomyces cerevisiae* on Growth Performance, Oxidative Status, and Immune Response of Sea Bream \(*Sparus aurata*\) \(mdpi.com\)](#)

MATRINE

Antiparasitic effects of *Sophora flavescens* root extracts on the ciliate, *Cryptocaryon irritans*. By Goto et al (2015, Aquaculture, Vol.435, p.173-177)

Antiparasitic effect of matrine and oxymatrine (quinolizidine alkaloids) on the ciliate *Cryptocaryon irritans* in the red sea bream *Pagrus major*. By Goto et al. (2015, Aquaculture Vol. 437, p.339-343)

Un nouveau type de Points Blancs *Neoichthyophthirius schlotfeldti*. By Bassleer (2018, AquaMag 39, 70-73)

Erreger einer neuen Weisspüktchenkrankheit : *Neoichthyophthirius schlotfeldti*. By Bassleer (2018, Amazonas, 78, 42-45)

ALOE

***Aloe vera* enhances the innate immune response of pacu (*Piaractus mesopotamicus*) after transport stress and combined heat killed *Aeromonas hydrophila* infection.**

By Zanuzzo et al (2017, Fish & Shell Immunology, Vol. 65, 198-205)

The effects of different levels of *Aloe vera* extract on some of the hematological and non-specific immune parameters in Siberian sturgeon (*Acipenser baerii*) Bazari Moghaddam et al. (2017, Iranian Journal of Fisheries Sciences 16(4) 1234-1247)

Effect of oral consumption of *Aloe vera* on intestinal microflora and liver tissue in rainbow trout. By Parsa et al. (2016, Iranian Journal of Fisheries Sciences,, 15 (1) 591-596)

Evaluation of growth and metabolism of *Labeo rohita* fingerlings with *Aloe vera* supplementation diet. By Bishnoi et al. (2017, Journal of Entomology and Zoology Studies, 5(4):1595-99)

Positive effect of *Aloe vera* in *Litopenaeus vannamei* (SHRIMP) challenged with *Vibrio parahaemolyticis* and white spot syndrome virus. By Trejo-Flores et al. (2016, Aquaculture, Vol. 465, 60-64)

Influence of certain herbal additives (i.e. *Aloe vera*) on the growth, survival and disease resistance of goldfish, *Carassius auratus*. By Ahilan et al. (2010, J. Vet.Sciences, 6 (1) 5-11)

GARLIC

Effects of garlic-supplemented diet on growth performance and intestinal microbiota of rainbow trout (*Oncorhynchus mykiss*)

Büyükdeveci ,Balcázar , Demirkale ,Dikel; (2018, Aquaculture, Vol 486, p. 170-174)

Evaluation of Dietary Addition of Garlic (*Allium Sativum* L.) Lobes on Growth Performance, Feed utilization, and Physiological Responses of *Oreochromis Niloticus*, Fingerlings

Mehrim, A.I., Khalil, F.F. and Refaey, M.M.; Abbassa (2014, Int.J.Aqua., Vol 7, N° 2)

Individual and combined Effects of Moringa leaf and Garlic powder on growth and plasma biochemical indices of *Clarias gariepinus* juveniles.

Adeneiji, Wusu, Falana (2019, American Journal of Food Science and Technology, Vol 7, N° 5, 137-145)

Effects of Garlic and Alium-derived products on the growth and metabolism of *Spiroucleus vortens*.

Millet, Loyd, et al. (2011, Experimental Parasitology Vol 127, p.490-499)

The redox-active drug metronidazole and thiol-depleting garlic compounds act synergistically in the protist parasite *Spiroucleus vortens*. By Williams, Vacca, et al. (2016, Molecular & Biochemical Parasitology Vol 206, p.20-28)

Antimicrobial properties of allicin from garlic

Ankri, & Mirelman; (1999, Microbes & infection 2, p.125-129)

Epizootics of *Pseudomonas anguilliseptica* among cultured seabream (*Sparus aurata*) populations: Control and treatment strategies (Garlic);
By Amr. Fadel et al. (2018, Microbial Pathogenesis, Vol. 121, pages 1-8)

Effect of Garlic and alium-derived products on the growth and metabolism of *Spiroucleus vortens* ; Coralie Millet et al. (2011, Experimental Parasitology 127 (490-499)

CHLORELLA

The use of macro- and microalgae as functional ingredients in diets for meagre (*Argyrosomus regius*) By Monteiro et al. (2018, Frontiers in Marine Science 5)

Effects of *Chlorella vulgaris* on blood and immunological parameters of Caspian Sea Salmon (*Salmo trutta caspius*) fry exposed to Viral Nervous Necrosis (VNN) virus. By Sabera et al. (2017, Iranian Journal of Fisheries Sciences, 16(2) 494-510)

Ameliorative effects of dietary *Chlorella vulgaris* and β -glucan against diazinon-induced toxicity in Nile tilapia (*Oreochromis niloticus*. By Abdelhamid-Gehad, Elshopakey-Abeer, Aziza (2020, Fish & Shellfish Immunology, Vol 96, p. 213-222)

Protective effects of *Chlorella vulgaris* as feed additive on growth performance, immunity, histopathology, disease resistance against *Vibrio* in shrimp.
<https://link.springer.com/article/10.1007/s10499-023-01298-y>

HERBAL: PEPPERMINT(*Mentha*), THYME(*Thymus*), MUGWORT(*Artemisia*), CHICKWEED(*Stellaria*)

Plant-derived compounds as an alternative treatment against parasites in fish farming: a review. By Wunderlich et al. (2017, INTECH, chapter 5, Doix.org/10.5772)

Use of medical plants in aquaculture. By Reverter et al. (2017, Diagnosis and control of Diseases of fish and shellfish, by Austin, page 223-262)

Research Progress in the application of Chinese Herbal Medicines in Aquaculture: A Review; by Hongyu Pu et al. (2017, Engineering Vol.3 , p. 731-737)

Application of Medicinal Herbs to Aquaculture in Asia. By Direkbusarakom (2004, Walailak J. Sci. & Tech; 1 (1):7-14)

The antibacterial and antiviral activity of herbal extracts (*STELLARIA*, *ARTEMISIA*) for fish pathogens. By Shangliang et al. (1990, J. Ocean University of Qingdao; 20: 53-60)

Prevention and control of fish diseases by herbal medicine. By Rajandra (1990, Fish Health Section News, 3: 3-4)

Herbs and their application for control fish disease in Vietnam. By Dung (1990, National Aquaculture Research Institute, Technical paper, p.7)

Effects of thymol (*THYME*) supplementation on performance, mortality and branchial energetic metabolism in grass carp experimentally infected by *Aeromonas hydrophila* by Morsella, Baldiserra Et al. (2019, Microbial Pathogenesis)

A preliminary investigation into the potential effect of *ARTEMISIA afra* on growth and disease resistance in sub-adults of *Oreochromis mossambicus*. By Mbokane & Moyo (2018, Aquaculture 418, p. 197-202)

The influence of some phytobiotics (*THYME*) on growth performance at *Oreochromis niloticus* reared in intensive recirculating aquaculture system. By Antache et al. (2013, University of Agricultural Sciences and Veterinary Medicine, p. 204-208)

ACAI:

Phytochemical composition and thermal stability of two commercial açai species, *Euterpe oleracea* and *Euterpe precatoria*. By Pacheco-Palencia et al (2009, Food Chemistry, 01.034)

Berries from South America: a comprehensive review on chemistry, health potential, and commercialization. Schreckinger ME, Lotton J, Lila MA, et al. (2010, *Journal of Medicinal Food*. 13(2):233-246.)

Antioxidant capacity and other bioactivities of the freeze-dried Amazonian palm berry, *Euterpe oleracea* mart. (açai). Schauss et al. (2006, *J. Agric. Food Chem*. 54(22):8604-10.)

PUMPKIN:

Effect of *Cucurbita mixta* (L.) seed meal enrichment diet on growth, immune response and disease resistance in *Oreochromis mossambicus*: by Musthafa et al. (2017, *Fish & Shellfish Immunology*, Vol 68, p. 509-515)

Evaluation of Anthelmintic Activity and composition of Pumpkin (*Cucurbita pepo*) Seed Extracts – In Vitro and in Vivo Studies. By Grzybek et al. (2016, *Int. J. Mol. Sci. Ref.* 1422-0067)

GSE/GRAPEFRUIT SEED EXTRACT

Effects of dietary grape seed extract, green tea extract, peanut extract and Vitamin C supplementation on metabolism and survival of greenlip abalone (*Haliotis laevigata*) cultured in high temperature. Duong et all. (2016, *Aquaculture*, Volume 464, p. 364-373)

The effectiveness of processed grapefruit-seed extract as an antibacterial agent; By Reagor et all. (2002, *J. Altern. Complement Med.* (3):325-32)

Antimicrobial activity of grapefruit seed and pulp ethanolic extract. By Cvetnic & Knezevic, (2004, *Acta Pharm.* 54 (3):243-50))

MORINGA:

Dietary supplementation of drumstick tree, *Moringa oleifera*, improves mucosal immune response in skin and gills of seabream, *Sparus aurata*, and attenuates the effect of hydrogen peroxide exposure. By Abdallah Tageldein Mansour et all (2020, *Fish Physiology and Biochemistry*, p. 1-16)

Effect of *Moringa olifera* leaves on growth and gut microbiota of Nile tilapia (*Oreochromis niloticus*) <https://www.scielo.br/j/bjb/a/drZbqs6JNw5wYvwhThVRKrv/>

Moringa olifeira leaf powder can be included in the fish diet to enhance immune response under normal health conditions and lower the infection-associated inflammatory response. Therefore we recommend to use DR. BASSLEER BIOFISH FOOD

GSE/MORINGA to help fish to overcome or to fight or to prevent from bacterial infections (we added on Grapefruit Seed extract= extra help to fight off bacterial infections).

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9260175/>

LAPACHO:

Napthtoquinone: bioactivity and green synthesis. By Peralta et al. (2015, The Battle against microbial pathogens, Mendez-Vilas, Ed., p.542-550)

Synthesis of Napthofuranquinones with activity against *Trypanosoma cruzi*. By Silva et al. (2006, J.Med.Chem. 41 (4):526-30)

Antiplasmodial activity of naphthoquinones related to lapachol and bata-lapachol. By Perza-Sacau (2005, Chem. Biodivers. 2(2): 264-74)

Le syndrome de la Tête et de la Ligne Latérale. By Bassleer (2018, AquaMag 40, 70-73)

Kopf- und Seitenliniensyndrom/-erosion (KSLS/KSLE), auch Lochkrankheit genannt, bei tropischen Süßwasser- und Meeresfischen und seine Verbindung mit der parasitären Infektion durch *Spironucleus* und anderen Krankheiten mit einigen Vorschlägen zur Diagnose, Vorbeugung und Heilung. By Bassleer (2018, DCG-Informationen 49 (5): 110-115)

Gatenziekte bij zoet- en zeewatervissen. By Bassleer (2018, Aquarium Wereld, 71/10: p. 329-337)(NBAT, Jaargang 25, p.4-9)

FUCO

Can Fucoidan decrease the mortalities caused by Columnaris disease in Nile Tilapia. By H. Mahgoub; (2018, World Journal of Agriculture Research, Vol 6, N° 1, 1-4)

Dietary Influence of Fucoidan supplementation on growth of *Lates calcarifer*. By Tuller et al. (2012, Aquaculture Research, 1-6)

Effect of fucoidan from *Turbinaria ornata* against marine ornamental fish pathogens. By Marudhupandi et al., (2013, Journal of Coastal Life Medicine, 1 (4): 282-286)

The effect of fucoidan from brown seaweed *Sargassum wightii* on WSSV resistance and immune activity in shrimp *Penaeus monodon*. By Immanuel et al, (2012, Fish Shell Immunolog. 32 (4): 551-564)

Mycobacterium und davon ausgelöste Fischtuberkulose. By Gerald Bassleer (2020, Amazonas Nr. 88, p. 56-59)

Biomedical Applications of Fucoidan, Seaweed Polysaccharides
By Senthilkumar et al (2017, Seaweed polysaccharides Isolation, Biological and Biomedical Applications, p. 269-281)

Fucoidan Extracted from *Undaria pinnatifida*: Source for Nutraceuticals/Functional Foods. By Zhao et al. (2018, Mar. Drugs, 16(9), 321))

Marine Seaweed Polysaccharides)Based engineered Cues for the modern biomedical sector; By Bilar & Iqbal (2020, Marine Drugs, 18 (7))

White shrimp *Litopenaeus vannamei* that have received fucoidan exhibit a defense against *Vibrio alginolyticus* and WSSV despite their recovery of immune parameters to background levels

<https://www.sciencedirect.com/science/article/abs/pii/S1050464816306933>

Stimulatory effects of seaweed *Laminaria digitata* polysaccharides additives on growth, immune-antioxidant potency and related genes induction in Rohu carp (*Labeo rohita*) during *Flavobacterium columnare* infection

<https://www.sciencedirect.com/science/article/abs/pii/S004484862301027X>

PROFESSIONAL CARE: Forte+Chlorella+Açai

Ameliorative effects of dietary *Chlorella vulgaris* and β -glucan against diazinon-induced toxicity in Nile tilapia (*Oreochromis niloticus*. By Abdelhamid-Gehad, Elshopakey-Abeer, Aziza (2020, Fish & Shellfish Immunology, Vol 96, p. 213-222)

PROFESSIONAL TREAT: Garlic+Aloe+Herbal

LORICARIDAE

"After 25 days of DR. BASSLEER BIOFISH FOOD the Loricaridae L333 presented 90-100% of active sperm cells. The other brands were not so good." (Study is a PHD-thesis that will be finished end 2020) REFERENCE: Prof. Dr. Leandro Melo de Sousa (Universidade Federal do Pará Laboratório de Aquicultura de Peixes Ornamentais do Xingu (LAQUAX) Laboratório de Ictiologia de Altamira (LIA) R. Coronel José Porfírio, 2515 Bairro São Sebastião, Altamira-PA, Brazil.)